

These are all freshwater type wetlands (no tidal/saltwater wetlands are included in this study). It will conclude in 2011.

DWQ is also planning to develop a long-term wetlands monitoring plan for the State, however, it currently lacks the funding and resources to get this effort underway.

5. Use the following table to characterize direct and indirect threats to coastal wetlands, both natural and man-made. If necessary, additional narrative can be provided below to describe threats.

Type of threat	Severity of impacts (H,M,L)	Geographic scope of impacts (extensive or limited)	Irreversibility (H,M,L)
Development/Fill	M	Extensive - coastwide	M
Alteration of hydrology	H	Limited - non-tidal	M
Erosion	M	Extensive - coastwide	M
Pollution (incl. nutrients)	M	Extensive - coastwide	M
Channelization	L	Limited - non-tidal	M
Nuisance or exotic species	L	Limited - non-tidal	M
Freshwater input	L	Limited - coastwide	M
Sea level rise/change*	M	Extensive - coastwide	H
Other (please specify)			

* For the past 30 years, our policies and strategies have been based on a SLR rate of 1-foot to 1½-feet per century. However, based on the recommendation from the CRC's Science Panel on Coastal Hazards (March 2010), the NC Coastal Resources Commission has adopted a rise of 1 meter by 2100 for planning purposes. This accounts for an accelerated rise. A common thread regarding our SLR ratings throughout this document is that we are considering changing conditions over the long term. Therefore, it may be considered "moderate" or "low" in some areas and then "high" in others depending on the program area being evaluated (i.e., see Coastal Hazards Strategy, Program Change 3). At this time, SLR is considered a "moderate" threat to wetlands, but could become "high" with the results of future studies and data.

Development/Fill: The increase of impervious surface in coastal North Carolina causes loss and degradation of both riparian and non-riparian wetlands. An analysis of a subset of DWQ's Section 401 certification records (1997-2003) indicated that upland development (including road construction) accounted for 33% of the wetland impacts in eastern North Carolina. Upland development includes residential lots, commercial facilities, utility cables/pipelines, wastewater treatment plants, schools, churches, and other activities converting wetland habitat to uplands or supporting upland development (i.e., construction of roads, highways, bridges, and culverts). Land use changes associated with population growth have been and continue to be the primary anthropogenic cause of wetland habitat loss. Wetland impacts due to development can be expected to increase dramatically as the population in coastal counties continues to grow.

Alteration of hydrology: The 1997-2003 trend in wetland loss showed water control projects as the major source of wetland impacts (36% of impacted acres). Water control includes the construction of impoundments, reservoirs, ditches, canals, water intakes, storm drains,